8

## Patent claims

WO 2004/070131

- 1. An arrangement of truss beams as two chord beams with at least one cast chord (8), and of building elements with a slab (9) with strengthening truss beams (15) with at least one cast chord (8), in which the strengthening truss beams contain a beam web assembly (1,4) consisting of truss web members of a rod, wire or strip iron material, which truss web members are bent and joined to such design that they, when seen in the longitudinal direction of the chord, form a zigzag or zigzag-like pattern or, as truss braces being placed diagonally in relation to the chord's (8) longitudinal direction, into zigzag or saw tooth shape, thus forming a truss web, fastened to the chords in a truss beam or to the chord and the slab in a building element,
- characterised in that the beam web assembly contains several truss web members consisting of a rod bent to a triangular shape or a triangle like shape (1,4), that each truss web member has hook-like bends (2,2') in both ends, the bends being mirror images of each other,
- that the middle part of said web member is straight and forms the base in said triangle shaped member, that said web member is bent, in the main symmetrical view, around the middle of said base part, the straight ends forming the side parts in said triangle shaped web member,
- that said end bends (2,2') are oriented beside each other when seen in the chord (8) longitudinal direction and wrapped over adjacent to each other so that said straight ends of said web members intersect each other in one of said triangle corners, and together with said end bends (2,2') form a loop so that one
- with the chord (8) longitudinal reinforcement rod (6) can be threaded inside said loops (2;2'), where said end bends are somewhat or entirely transverse to the chord longitudinal direction and

that said bends (2,2') are cast inside the chord (8),

35

40

2. An arrangement according to patent claim 1, characterised in that said truss web members (1,4) are bent in four steps, counting first from the rod end, bending (2), after that the first base bending (3), then the second base bending (3') and at last the second end bending (2').

5

9

An arrangement according to patent claim 1 or 2, characterised in that said truss web members are bent from a coiled rod, which passes through a straightening apparatus, then being bent and after that cut into completed portions after each truss web member is formed.